

CLAIMS

1. A wiring substrate, having a conduction path that guide an electrical signal between a signal input surface and a signal output surface,

5 the wiring substrate comprising at least a first wiring substrate, disposed at the signal input surface side, and a second wiring substrate, connected to the first wiring substrate at the signal output surface side, each wiring substrate respectively comprising a glass substrate, formed of a predetermined glass material having a radiation shielding function and provided with a through hole, and a conductive member, disposed in the through hole and functioning as the conduction path by providing electrical continuity between the input surface and the output surface, 10 and

15 wherein in the view in the conduction direction from the signal input surface to the signal output surface, the position of the through hole in the first wiring substrate differs from the position of the through hole in the second wiring substrate.

20 2. The wiring substrate according to Claim 1, wherein each of the first wiring substrate and the second wiring substrate is formed of the glass material that contains lead.

3. The wiring substrate according to Claim 1 or 2, wherein the conductive member of each of the first wiring substrate and second wiring substrate is formed and disposed on the inner wall of the through hole that is provided in the glass substrate.

25 4. The wiring substrate according to Claim 1 or 2, wherein the conductive member of each of the first wiring substrate and second

wiring substrate is disposed by filling the interior of the through hole that is provided in the glass substrate.

5. The wiring substrate according to any of Claims 1 through 4, wherein the glass substrate of each of the first wiring substrate and second wiring substrate is a glass substrate, wherein a plurality of the through holes are provided by fusing together and integrally forming a plurality of hollow glass members that are open at both ends.

6. A radiation detector comprising:

10 a radiation detecting means, outputting a detected signal upon detecting radiation made incident thereon;

a signal processing means, processing the detected signal from the radiation detecting means; and

15 a wiring substrate section, having the wiring substrate according to any of Claims 1 through 5 that is provided with the conduction path that guide the detected signal between the signal input surface and the signal output surface, the radiation detecting means and the signal processing means being connected to the signal input surface and the signal output surface, respectively; and

20 wherein the radiation detecting means, the wiring substrate section, and the signal processing means are positioned in that order along a predetermined alignment direction that substantially matches the conduction direction in the wiring substrate.

25 7. The radiation detector according to Claim 6, wherein the radiation detecting means comprises a scintillator, generating scintillation light upon incidence of radiation; and a semiconductor photodetecting element, detecting the scintillation light from the

scintillator.

8. The radiation detector according to Claim 6, wherein the radiation detecting means comprises a semiconductor detecting element, detecting radiation made incident thereon.

5 9. The radiation detector according to any of Claims 6 through 8, wherein at least one of either the combination of the wiring substrate section and the radiation detecting means or the combination of the wiring substrate section and the signal processing means is electrically connected via a bump electrode.